

## Williams Takes New Position

Dr. Clarence G. Williams has been appointed to the new post of Assistant Dean of the Graduate School for minority students, effective September 1, Dr. Irwin W. Sizer, Dean of the Graduate School has announced.

The position was created in response to the growing numbers of minority students who come to MIT for graduate study, according to Dean Sizer. "During the past four years the number of minority students has grown from 16 in 1968 to 112 expected this fall. Minorities represented include blacks, chicanos, Puerto Ricans, American Indians and one Eskimo," Dr. Sizer said.

Dean Williams received the B.A. degree from North Carolina Central University. After studying at Cornell University, he received the M.A. degree in guidance and counseling from Hampton Institute. He completed his doctoral studies in the field of higher education administration at the University of Connecticut.

Dean Williams has had broad professional experience. He served as an Assistant to the Dean of Hampton Institute and as a counselor in the Counseling and Testing Center in the Dean's Office at the University of Connecticut.

He has also been a high school teacher and basketball coach. In addition, Dr. Williams has been a leader in Black-White Training Laboratories.

Dean Sizer said the increase in the number of graduate students from minority groups was brought about by strenuous efforts by several groups at the Institute, chiefly the Black Student Union, (Continued on page 6)

## Lloyd Rodwin Discusses Criteria for Future New Communities

In the August 26 issue of Business Week, Lloyd Rodwin, head of the Department of Urban Studies and Planning at MIT, was one of 11 urbanologists quoted in a brief article titled "The Need to Set Priorities for National Growth." Shortly before, on July 21, Senator Hubert H. Humphrey read into the Congressional Record a paper presented at the American Institute of Architects' Conference on New Communities in Washington, D.C. last November by Professor Rodwin and Lawrence Susskind, assistant professor of urban planning at MIT, from which the excerpts below are taken.

By Lloyd Rodwin and Lawrence Susskind

Suppose that twenty-five years from now sixty federally assisted new communities have been built in the United States. That would not be an unreasonable forecast.



WALL-TO-WALL BAGGAGE covered the floor of the Sala de Puerto Rico as the Class of '76 arrived last week. —Photos by Margo Foote

## MIT, MGH Plan to Use Nuclear Reactor to Treat Brain Tumors

A team of researchers from MIT and Massachusetts General Hospital is planning to use the neutrons emitted by the five-million watt MIT nuclear reactor on a so far incurable form of brain cancer.

The method the team intends to use to fight brain tumors is called neutron capture therapy. When it was first tried at MIT about ten years ago, a similar type of therapy was not successful. Since then most of the difficulties have

## Freshmen Arrive for Orientation

Most of the freshman class, numbering some 1,050, arrived as scheduled last Friday for ten days of orientation to MIT.

The orientation program is broken down into three major segments: residence selection, academic orientation and extracurricular orientation.

New students are now in the process of selecting where they will live. All unmarried freshmen are required to live in campus housing, including fraternities and Student House, if they do not live at home. The fraternity system at MIT is somewhat different from that at other universities, according to Associate Dean for Student Affairs Richard Sorenson. "At MIT the fraternities are an integral part of the residential program. We depend heavily on them for student housing."

Fraternity rushing takes place during the first few days of Residence/Orientation Week. By now, the 29 fraternities have extended bids to the freshmen they hope to pledge and most of the freshmen have made their decisions on where they would like to live.

As Tech Talk went to press 329 freshmen had been pledged by Fraternities. "We particularly needed an adequate rush this year because the freshmen class is larger than we expected," ex-

plained Kenneth Browning, Assistant Dean for Student Affairs, who is chiefly concerned with housing.

"The Institute houses have been over crowded for some time," he said. "Extraordinarily good rushes during the past two years have alleviated the problem somewhat. However, because of the size of the Class of '76, there will be additional pressure on the dormitories this year.

"Most of the final residence assignments have been made by now," Browning said. "Every effort is made to house each student in the house of his or her first preference, but that isn't always possible. Some residence halls are traditionally oversubscribed, and

(Continued on page 6)



A freshman and her mother share the load on their way to the R/O Center.

## Athletic Events Require Card

The Athletic Department has announced two upcoming events—the Faculty/Staff Tennis Tournament and swimming instruction for faculty/staff children—which require a 1972-73 athletic card.

The Faculty/Staff Tennis Tournament will be held in early October, but applications must be filed with Professor Edward Crocker, Room W32-133, before Thursday, September 21. Both singles and doubles matches will be played with the first rounds taking place before Thursday, September 28. Application blanks are available from the Athletic Department, Room W32-109.

Swimming instruction for faculty/staff children, taught by Varsity Swimming Coach Charles Batterman, will be held Saturday mornings from September 23 through November 11. A beginners class will meet at 10:30am followed by an advanced class at 11:30am. Both classes will be limited in number and restricted to children between the ages of six and 14. Application blanks along with a \$15 instruction fee should be sent to the Athletic Department, Room W32-109, before Thursday, September 21.

upon older urban centers. These communities, built in the style of Columbia, Maryland; Jonathan, Minnesota; and Lysander, New York, will all probably end up with populations of 100,000 to 200,000. Although most of these communities are presently being planned for somewhat smaller numbers of people, they are all in rapidly urbanizing areas and our expectation is that they will all exceed their population targets.

Less than a third will be self-contained cities with population levels between 50,000 to 100,000. Independent new communities in lagging areas are most often thought of as large, self-contained developments. This is dead wrong. Unless very special steps are taken, new communities designed as growth centers in lagging areas are likely to be smaller rather than larger....

Perhaps as many as ten new (Continued on page 7)

been worked out. The treatment will combine the uncharged nuclear particle called the neutron with the element boron, to produce nuclear "bullets" that destroy individual tumor cells.

Neutron capture therapy will be used on a type of brain tumor called a glioblastoma, which is now considered untreatable. Although the tumor can be operated upon, and the bulk of it removed, the tumor's many fine extensions, which invade the normal brain tissue, are impossible to dissect away and the tumor quickly regrows.

Dr. Gordon Brownell, professor of nuclear engineering at MIT and head of the physics research laboratory at MGH, and Dr. Brian Murray, a research fellow in the physics research laboratory, have been conducting the research that will allow this method of therapy to be used to treat patients, working in close collaboration with Dr. William Sweet, head of the neurosurgical service at MGH.

The major problem when attempting to treat cancer with radiation or chemotherapy, Dr. Brownell explains, is that cancer cells and normal cells are so similar. That similarity makes it almost impossible to destroy malignant cells without also destroying nearby, healthy tissue.

If neutron capture therapy is successful, it will be primarily (Continued on page 8)

# Big Feed

Spotting a general move toward the Great Court late last Friday, we tagged along and found ourself in the midst of MIT's annual Freshman Picnic. Throngs. "I'm rated at 1654," we overheard one freshman saying to a colleague, "but I hear there are tournaments up here they won't even let you into unless you're 1700 or better." Before we could ask him what he thought of Fischer's winning the world championship, he had vanished into the hoard streaming toward the far end of the Great Court, where food was being set forth on groaning boards.

We went that way ourself, casting a friendly eye on the new members of the MIT community lounging on the grassy banks flanking the Great Court's pastoral expanse. It was cool and overcast. Dress was informal. We marked one young man, looking only slightly bewildered, clutching HoToGAMIT in one hand and a red frisbee in the other.

Behind the tables, white-coated minions were spreading what appeared to be the content of some vast technological cornucopia. We introduced ourself to a dapper man surveying this scene and asked the name of what looked to us like the largest leg of lamb in the world. "That's a steamboat roast of beef," he told us with satisfaction. "Top round and bottom round all in one." He turned out to be David Cantley, who used to run these affairs in person, but now works for Stauffer's, the firm that caters them. "We'll feed about 1400 people today," Mr. Cantley went on. "Tossed salad, roast beef, corn-on-the-cob, watermelon. That's about it. Some of the kids like to make sandwiches, so we'll have bulky rolls, too."

At this moment, there was a rush on the food from the groups waiting at the sides of the Great Court. Managers raced forward to head them off, crying "Back, back." "Usually if you say 4:30 on an invitation, the people don't come until five," Mr. Cantley remarked with amusement. "But when they tell freshmen 4:30—well, they believe it." Lines began to form, as people waited good naturedly for the signal to be given. Cheers greeted a food services truck, which backed with abandon into a hedge to unload dozens and dozens of bulky rolls in large plastic trays labeled "Green-Freedman."

We noticed that one of the five lines was headed by Bob Elkin, chairman of *The Tech*, whose name tag proclaimed him as a member of the R/O Committee. "Everybody has to be somewhere," he said, and told us he was an assistant adviser to several freshmen. As we were talking, the line began to move, and we noticed that Professor Richard Leacock was standing behind one of the tables filming freshmen as they began to be served. His assistant, a young bare-footed woman whose name was Kate Gulliver, was holding a microphone in the general direction of the steamboat roast. Professor Leacock was using his new super-8 system, it turned out, and the microphone was what picked up the sound of student voices.

A wonderful, crowded hush fell over the Great Court as the lines steadily progressed toward the tables and satisfied customers left them to eat along the banks. As we walked back along the lines, we fell in with Dean Robert Alberty,

who was greeting students. "It's probably trite to say," he said, "but every year they look a little younger." The Dean introduced himself, and then us, to two students from Malaysia, chatted for a moment, and then went off down the line. "Hi. I'm Dean Alberty, School of Science. Welcome to MIT."

We saw John Mattill, editor of *Technology Review*, who confessed to us that this was his first Freshman Picnic. Larry Susskind, assistant professor of urban studies and planning, asked us if we knew where an extra picnic ticket was to be had. We told him we didn't. We saw Constantine Simonides and John Wynne, a brace of vice presidents, and asked them what they thought of the new class. "I'd say it was the largest in recent memory," Mr. Wynne replied with a twinkle in his eyes. "About 25 members larger than last year," Mr. Simonides agreed surveying the crowd.

Spying a middle-aged man and woman standing slightly apart we went over and introduced ourself, inquiring if one of their progeny happened to be a new freshman. "That's our son, Robert, right over there," the man told us, pointing at the crowd. They were Mr. and Mrs. Anthony Lepkowski, of Wilmington, Delaware, where Mr. Lepkowski, he told us, is a general contractor. "We've been up here four days," Mrs. Lepkowski said. "It kind of worries you when they leave home, so we thought we'd come up and see where Robert's going to be. It certainly is pretty." Robert Lepkowski, accompanied by an extremely pretty girl, joined his parents to show them a picture he'd just taken with a Polaroid camera. It was a picture of the Great Dome. "I took this one the other day when we went to visit Bunker Hill," Robert told us, displaying a picture of the monument there. He was going into mechanical engineering, or perhaps ocean engineering, he said, and it suddenly struck us that he would graduate in 1976. "But I guess I won't be here on the Fourth of July," he remarked.

For a moment we watched a lively game of frisbee taking place within a circle close to the steps of Building 10. The idea of the game seemed to be to hit a young man in the center with one of three frisbees sailing back and forth across the circle—but the target, who had an admirable assortment of flips, kept sailing the colorful discs back at his colleagues.

President Wiesner made, as they say, a few remarks and, recalling that last year he was himself a freshman president, he kept them brief and to the point. Noting that many students pick a university for the quality of its faculty, he reminded his audience that many faculty members choose their institution for the quality of its students. And citing some of the current antipathy toward science and technology, the president said: "You are bucking the contemporary mood, but I don't think you'll be disappointed. We need to create a safer and more decent world. We need to protect the human spirit and the environment, both the natural and the man-made." There was at MIT much opportunity to embark upon these tasks, Dr. Wiesner told his listeners and in the years just ahead of them, he said, they would need "a sense of duty and a sense of humor." And he concluded with one warm word: "Welcome."



Like a snail with his house on his back, this freshman trudges off to his room assignment.

## The Class of '76 Meets MIT



Informality, questions and confusion characterized R/O Center headquarters in the Student Center last weekend.



This student finds a quiet windowsill where he can read in the R/O Center.

Photos by  
Margo Foote  
and  
Marc PoKempner



The Class of 1976 listening to welcoming remarks at the Freshman Picnic in the Great Court.

# ISA Activities Phased Out After 30 Years

The International Student Association (ISA) of Greater Boston has phased out all of its activities after some 30 years of operation.

Formed in the early 1940s by a group of people concerned with the welfare of foreign students in the New England area, the ISA maintained a house at 33 Garden Street in Cambridge where volunteers provided a variety of hospitality programs for the visitors. Mrs. Karl Taylor Compton, wife of MIT's ninth president, was one of the first volunteers at ISA, along with the wives of other area university presidents.

The hospitality program included afternoon teas, folkdancing sessions, international dinners, etc. A number of students lived in the Garden Street house which was run for years by a missionary couple. According to Gene Chamberlain, MIT foreign student advisor, "They were literally mother and father to generations of foreign students."

Once the central clearinghouse for foreign students in the New England area, the ISA's popularity began fading in the early 1960s. Mr. Chamberlain explains, "When ISA first started, the number of foreign students in the area was much lower than it is today. Colleges and universities had no

special facilities for them. The students, however, knew very little about American lifestyles and needed a place to go where they could feel at home.

"When the foreign student population started to increase in the middle 1960s," Mr. Chamberlain continues, "colleges recognized their needs and began offering special services for foreign students—advisors, social clubs, housing, etc. Foreign students coming to this country today are much more sophisticated and independent than they were years ago. These two factors combined to render many ISA functions redundant so the directors of the association have decided to phase out all ISA operations. Their original goals have been met."

Two ISA services will be continued by the Boston Area Seminar for International Students (BASIS)—an "arrival program" which makes arrangements for an American host to meet foreign students on their arrival in Boston; and a "visit program" which arranges hospitality programs and itineraries for short-term foreign visitors.

## Adult Classes Begin Soon

General evening classes sponsored by the Board of Adult Services, Commonwealth of Massachusetts Department of Education, will begin on September 23 at MIT and Harvard.

The classes, which range from computer programming to theatre workshops, are open to the public for a nominal fee. Most meet two evenings a week for two hours a session.

Interested persons can register at the Board of Adult Services, 9am to 4pm, 182 Tremont Street, Boston. Registration for classes at MIT will be held in Building 7 on September 18, 19, and 20 from 6 to 8pm.

Free copies of the Board's fall brochure, giving course descriptions, schedules and fees, will soon be available in the Information Center, Room 7-111.

## IPC Offers Two Courses

The Information Processing Center (IPC) will offer two short, noncredit computer courses this September.

"Job Control Language Tutorial" will be offered September 6 through 12 to give students a working knowledge of Job Control Language as it is used at IPC. The course is directed toward present and potential 370 users who want to use the system more efficiently and programming experience in a compiler level language is required.

The course will meet from 2 to 3pm daily and there is a \$5 fee.

The second IPC course will be "OS Time-Sharing Option Course" to be held September 25 through October 3. This course is for people with previous computer experience and knowledge of a high level language and some knowledge of the IBM 360 Operating System.

The course will be given over a two week period with a daily one-hour lecture at 11am. Instruction will be supplemented by on-line workshops held at different times during the day. There will be a \$5 fee for this course.

## New Exhibit Is in Hayden

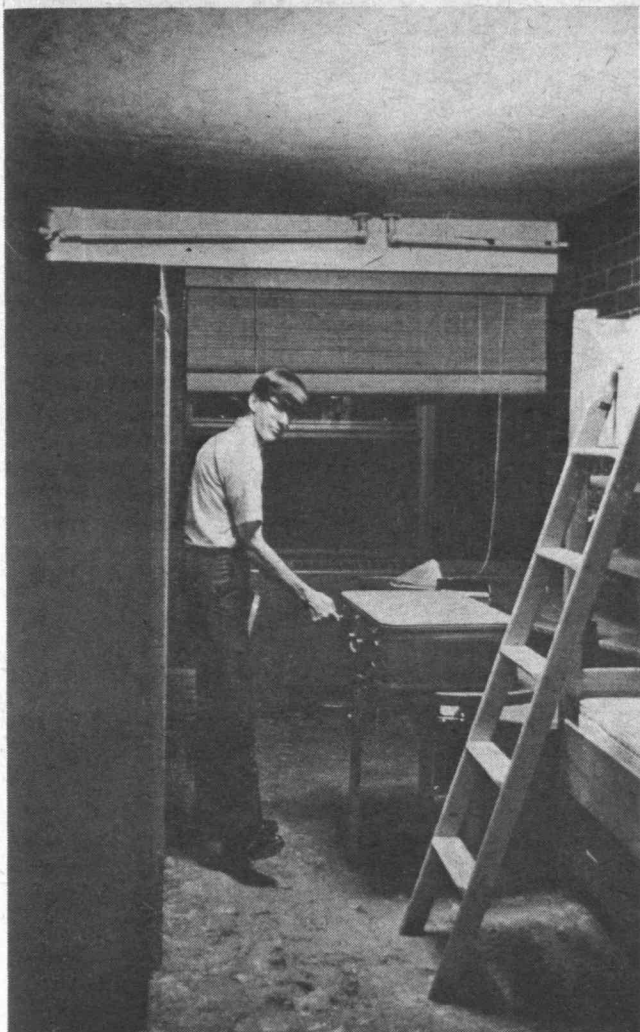
Selections of recent American painting and sculpture from MIT's own collection will be exhibited in Hayden Gallery from September 11 through September 22, sponsored by the Committee on the Visual Arts.

The show includes major works by such American painters as Jules Olitski, Gene Davis, Hans Hoffman, Paul Jenkins and Kathy Porter. Also in the exhibit are sculptures by Mark De Suvero, Jim Huntington and Alexander Calder.

Important new acquisitions from the F.H. Olsen Collection are included among the forty-some works in the exhibit. Original graphics from the Catherine Stratton Collection will be displayed in the Hayden Corridor Gallery.



The Great Court becomes a sea of hungry young people.



Before his final room assignment, this new student unpacks in temporary lodgings.



Professor Leacock, right, and his assistant check equipment while documenting the arrival of the freshmen.



Dr. Wiesner shares some informal conversation with students at the picnic.

**TECH TALK**  
Volume 17, Number 9  
September 6, 1972

**Editor**  
Joanne Miller

**Staff**  
Ellen Burbank  
Robert M. Byers  
Peter M. Close  
Bob McLean  
Linda Omohundro  
Ty Rabe  
Michael Seif  
Peter Spackman

**Business Manager**  
Paul E. Johnson

Tech Talk is published 50 times a year by the Institute Information Services, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, Mass. 02139, and distributed free to all members of the MIT community. Additional copies are available in the Information Center (Room 7-111) or in the News Office (Room 5-105). Large numbers of additional copies should be requested within two weeks of the issue date.

Mail subscriptions are \$5 per year. Checks should be made payable to Bursar, MIT, and mailed to the Business Manager, Room 5-122, MIT, Cambridge, Mass. 02139.

Please address all news and comment to the editorial office, Room 5-111, Ext. 3-3277.

# THE INSTITUTE CALENDAR

September 6  
through  
September 15

Thursday, September 14

**Dynamic Compliance of Railroad Tracks\***  
Dr. Leonard Kurzeil, Transportation Systems Center, Acoustics and Vibrations Group, Department of Transportation. Interdepartmental Acoustics Seminar. 4pm, Rm 5-134. Coffee, 3:30pm, Rm 1-114.

Friday, September 15

**Acoustic Holography**  
Byron B. Brenden, vice president engineering, Hologonics, Inc. Mechanical Engineering Seminar. 3pm, Rm 3-270. Coffee, 4pm, Rm 1-114.

## Seminars and Lectures

Wednesday, September 6

**Static and Dynamics of the Intermediate State in Superconductors\***  
Prof. L. Rinderer, University of Lausanne. Lecture and movie. National Magnet Lab Seminar. 4:15pm, NML 2nd Floor Conference Rm. Tea, coffee, 4pm.

## Community Meetings

**Research, Development and Technical Employees' Union**  
General membership meeting to discuss contract negotiations, constitutional amendment and Draper Lab divestment. Wednesday, September 6, 6:15pm, Knights of Columbus Hall, Arlington.

# R/O Week Schedule

### WEDNESDAY, SEPTEMBER 6

8am-5pm ESG Open House in Rm 24-612  
8:30-11:45am Calculus placement tests in Rm 2-102  
Advanced placement exams are being given today; call X3-4788  
9am-5pm Individual meetings with advisors  
9am-5pm Hillel Office Open House, 312 Memorial Drive  
10am-12n Core orientation in Kresge  
10:30am Transfer student meeting in Student Center Mezzanine Lounge  
12n Transfer student luncheon in Sala de Puerto Rico  
1:30-4:30pm Electives Midway in duPont Gym  
3-5pm Applied Math Open House in Rm 2-345  
7pm Surprise social event on Kresge Plaza  
7pm BSU discussion in BSU Lounge, Walker  
12m Student Center Committee movie—*I Love You, Alice B. Toklas*, free, Sala de Puerto Rico

### THURSDAY, SEPTEMBER 7

8am-5pm ESG Open House in Rm 24-612  
8:30-11:45am Calculus placement tests in Rm 2-102  
9am and 1pm Meeting for those interested in taking humanities in French option, Rm 4-270  
9am-5pm Individual meetings with advisors  
9am-12n ROTC Open House in Student Center Mezzanine Lounge  
9am-5pm Hillel Office Open House, 312 Memorial Drive  
10am Discussion of Boston with Professor Douglas Adams of mechanical engineering in Kresge Little Theatre  
11am Discussion of Boston night life with Judy Fairchild in Kresge Little Theatre  
12n Tour of the Freedom Trail leaves from R/O Center  
1pm Discussion on writing term papers with Linda Sibley in Rm 2-270  
2pm Tour of women's athletic facilities leaves from R/O Center  
2pm Discussion of the Selective Service with Dean Brown in Kresge Little Theatre  
3-5pm Applied Math Open House in Rm 2-345  
4pm Deadline for registration forms  
4pm Tour of National Magnet Laboratory leaves from R/O Center  
4pm Tour of the Draper Laboratory leaves from R/O Center  
6pm Non-Resident Student Association picnic/open house at 311 Memorial Drive  
7pm BSU discussion in McCormick Green Living Room  
7:30pm Hillel reception  
7:30pm Israeli folkdancing in T-Club Lounge, duPont Gym  
8pm Presentation by Committee on War-Related Research in Kresge Auditorium

### FRIDAY, SEPTEMBER 8

8am-5pm ESG Open House in Rm 24-612  
8:30-11:45am Calculus placement tests in Rm 2-102  
9am-3pm Hillel Office Open House, 312 Memorial Drive  
9am-5pm Pictures for MIT ID cards will be taken in Student Center Mezzanine Lounge  
10am Tour of the athletic facilities leaves from R/O Center  
11am Tour of Cambridge Electron Accelerator leaves from R/O Center  
12n-2pm Concourse orientation in Rm 37-252, free lunch, open to all freshmen  
1:30-4:30pm Activities Midway in duPont Gym  
2-5pm Freshman Project Year Open House in Rm 20C-117, free beer and pretzels  
3pm Deadline for submission of correction cards for registration  
3-5pm Applied Math Open House in Rm 2-345  
3:30pm Athletics Midway in Rockwell Cage  
6:15pm Wienie Roast in Rockwell Cage  
6:30pm Tour of Kenmore Square, ending at Fenway Park and a ballgame, leaves from R/O Center  
7 and 9:30pm APO movie—*Purple Death* (Flash Gordon), 50 cents, Rm 10-250  
8pm Chinese Students Club get-together in Student Center Rm 407  
8pm BSU party in BSU Lounge, Walker, 25 cents  
12m Student Center Committee movie—*The Guns of Navarone*, Sala de Puerto Rico, free

### SATURDAY, SEPTEMBER 9

10am Parents Orientation: bus tours of Boston leaving from R/O Center  
11am Tour of downtown Boston and shopping district leaves from R/O Center  
1pm New Asian Coalition Open House in Student Center Rm 407  
1:30-3:45pm Parents Orientation: speeches and panel discussions  
4pm Parents Orientation: tours of MIT leaving from R/O Center  
4pm BSU cookout in McCormick Country Kitchen  
7 and 9:30pm APO movie—*Casino Royale*, 50 cents, Rm 10-250

### SUNDAY, SEPTEMBER 10

11am Tours of MIT leaving from R/O Center  
3-5pm President's Reception at President's House, 111 Memorial Drive, or in case of rain, in Sala de Puerto Rico  
4pm BSU softball game on Briggs Field  
7 and 9:30pm APO movie—*Phantom of the Opera*, 50 cents, Rm 10-250  
7:30pm Folkdancing party in Sala de Puerto Rico

### DAILY

12:30-1:30pm Folkdancing on Kresge Plaza (weather permitting)

## Women's Forum

**Women's Forum\*\***  
Every Monday, 12n, Rm 10-105.

## Student Meetings

**Alpha Phi Omega\***  
Chapter meeting. Wednesday, September 13, 7:30pm, Student Center Rm 407.

**Student Information Processing Board Meeting\***  
Every Monday, 7:30pm, Rm 39-200.

## MIT Club Notes

**Chinese Students Club\*\***  
Execom meeting. Thursday, September 7, 8pm, Student Center Rm 400.

**MIT Club of Boston Luncheon\*\*\***  
Prof. John Collins of management, president of the Greater Boston Chamber of Commerce and former mayor of Boston, will discuss "Urban Affairs." Thursday, September 15, 12n-1:30pm, Aquarium Restaurant, 100 Atlantic Avenue, Boston. Tickets \$3.60 at the door. For reservations, call Mrs. Terre Crossley, X3-3878.

**Hobby Shop\*\***  
Open weekdays, 10am-4:30pm, duPont Gym basement. Fees: students \$6/term, community \$10/term. Call X3-4343.

**Tiddlywinks Association\***  
Every Monday, 8-11:15pm, Student Center Rm 491.

**Classical Guitar Society\*\***  
Special summer lessons for beginners, group and private. Tuesdays and Wednesdays. Call Vo Ta Han, 494-8353.

**Judo Club\*\***  
Every Monday, Wednesday, Friday, 5pm; every Saturday, 1pm. duPont Gym Exercise Rm. Beginners welcome.

**Outing Club\***  
Every Monday, Thursday, 5pm, Student Center Rm 473.

**MIT/DL Duplicate Bridge Club\*\***  
Every Tuesday, 6pm, Student Center Rm 491.

**Rugby Club**  
Summer rugby. Every Tuesday and Thursday, 5pm, Briggs Field.

**Nautical Association\*\***  
**Basic Sailing Shore School**, repeated every Wednesday throughout the summer, 5:15pm, Sailing Pavilion. Non-members welcome.

**Science Fiction Society\***  
Every Friday, 5pm, Student Center Rm 421.

**Student Homophile League\***  
Meeting and mixer meets Fridays, 8pm, Odd Fellows Hall, 536 Mass Ave, Cambridge. For gay help (anonymous) at MIT, call the student gay tutor, 492-7871 anytime.

**Chess Club\*\***  
Every Saturday and Sunday, 1:30-5:30pm, Student Center Rm 491.

## Social Events

**Mixer\***  
East Campus Social Committee. Friday, September 15, 8-12pm, Sala de Puerto Rico. Admission: \$1 men, 50 cents women.

**Mixer\***  
Chinese Students Club. Saturday, September 16, 8-12pm, Sala de Puerto Rico. Admission \$1.50.

**Muddy Charles Pub\*\***  
Join your friends at the Muddy Charles Pub, 110 Walker, daily 11:30am-7:30pm. Call X3-2158.

**Friday Afternoon Club\*\***  
Music, conversation and all the cold draft Budweiser you can drink. Every Friday, 6pm, the Thirsty Ear in Ashdown basement. Admission: men \$1, women 50 cents. Must be over 21.

## Music

**Concert Band**  
First rehearsal. Monday, September 11, 5pm, Student Center West Lounge.



# Centrex Is Working Well After 3 Weeks

The Institute's Centrex telephone system, initiated three and a half weeks ago, is working well despite a few wrinkles, according to Morton Berlan, telecommunication director.

The access or tie lines to other switchboards have been a recurring problem—mainly with tie lines which are routed through one outside switchboard to reach another. Some data lines have also reported trouble.

"A lot of problems have yet to be found," said Mr. Berlan. He said that there are also many problems which he never finds out about because of the self diagnostic capacity of the new system. These problems are handled directly by the telephone company.

The direct inward and outward

dialing capacity of the Centrex system has alleviated some pressure from the main Institute operators. "There are a flurry of calls handled by the Institute operators at the beginning of the week," said Mr. Berlan, "but they slacken off toward the end of the week."

The largest number of calls handled by the MIT operators still come in on the old 864-6900 intercept consoles. Callers to the old number are advised to dial the new number or to call the desired extension directly, if it is known. There is no charge to a caller for reaching the old number.

According to Mr. Berlan, many problems with the new system will go undiscovered until vacationing personnel return and report difficulties.

## Garet Receives GTE Foundation Fellowship

Michael S. Garet, a graduate student in the Sloan School of Management from Los Angeles, California, has been awarded a General Telephone and Electronics Foundation Fellowship in Science and Engineering.

MIT awarded the fellowship which was made possible by a contribution from the General Telephone and Electronics Foundation. The fellowship was established for an advanced degree candidate in the field of systems

analysis application to urban affairs. No conditions are imposed by the Foundation as to the selection of recipients or their fields of interest.

For several years MIT has been chosen as an institution where GTE Fellows can pursue their graduate studies. Foundation Fellowships are granted to students at leading scientific and engineering schools having curriculum in technical fields which are of interest to the General Telephone and Electronics Corporation.



Newly appointed Assistant Dean for the Graduate School Dr. Clarence Williams.

—Photo by Marc Pokempner

## Grad School Appoints New Assistant Dean

(Continued from page 1)

the Committee on Equal Educational Opportunity, the Chancellor's Office and the Graduate School itself. "In addition to recruitment, we have developed programs for financial assistance, tutoring and counseling, and aid in finding suitable housing," he said.

"Dr. Williams' broad experience will be of great value in guid-

ing the further growth and direction of the Institute's commitment to graduate students from minority groups," Dean Sizer said. "During the past spring and summer, a special selection committee of faculty, students and members of the administration have worked with me in screening some 100 candidates from all parts of the country for this key position."



Their faces reflecting puzzlement, the freshmen awaited the start of rush following the picnic Friday.

## R/O Week Continues

(Continued from page 1)

assignment to them is decided by lottery."

At press time approximately 600 freshmen had received final residence assignments. Of these, 75 percent were given assignments in their first choice of residence and another 20 percent in their second choice. "If everything goes according to schedule, we should have all the final assignments made by Friday," Browning said.

Beginning today the focus of R/O Week shifts to academics. Entering students will meet with their faculty advisors and take advanced placement tests. In addition, many departments and educational programs are holding open houses to acquaint the freshmen with what they are.

On Friday both an Activities Midway and an Athletics Midway are scheduled. The parents of freshmen will attend an orientation program on Saturday, and on Sunday the week closes with the traditional reception for freshmen and their parents at the President's House.



Frantic cleanup efforts in fraternities precede the onslaught of rush each year.

## Institute Child Care Facilities Started with Co-op Nursery

MIT has been involved in the family needs of its community since 1940 when a small group of married students started a co-operative nursery school and pediatric clinic in the old Westgate building.

Today, the Institute is involved in four separate child care facilities—the Technology Nursery School, the Family Day Care Program, the KLH Child Development Center, and the MIT Pediatric Clinic.

Technology Nursery School, organized in 1963 by the Office of the Dean for Student Affairs and the Planning Office, is an independent, nonprofit corporation operating year round. Children may be enrolled for morning and afternoon sessions, full or part time. Parents assist in the classroom or contribute time cleaning, repairing toys, and developing curriculum and adult programs. Tuition is 53 cents per hour for students' children and 74 cents per hour for non-students' children. For more information call the Eastgate section, Ext. 3-5989.

Established by the Planning Office in 1971, the Family Day Care Program serves children of all ages from the total MIT community. Day Care Parents care for children in their homes and take

part in a child care orientation session and monthly social and educational meetings. The MIT Social Work Service and Medical Department assist the program; volunteers from the community visit the day care homes to teach such skills as music, dance, art and science. Fees are negotiated between parents. Those who need day care or wish to be a Day Care Parent or volunteer should call Kathi Mahoney on Ext. 3-4973.

The KLH Child Development Center at 37 Landsdown Street in Cambridge serves about 60 children. MIT subsidizes the tuition of 12 children of Institute employees. The Center has a staff of highly trained, qualified teachers and administrators. The program includes hot lunches, recreation facilities and counseling services. Tuition is \$42.50 per week per child. Sandy Holland of the Personnel Office, Ext. 3-4276, coordinates MIT's participation in the program.

Opened in late 1970, the MIT Pediatric Clinic serves children of all members of the Institute community. Located in the Infirmary on Memorial Drive, the Clinic provides regular examinations, immunizations and sick child care. The fee for regular visits with the pediatrician, Dr. Edward Dyer, is

\$10; visits with the pediatric nurse practitioner, Helen Scannell, are \$6 for one child, \$10 for two children, and \$3 for short follow-up visits. The Clinic is open weekdays from 8:30am to 5pm and appointments can be made by calling Ext. 3-1505.

The Institute also is involved with the Cambridge Day Care Association (CDCA) which provides technical assistance and guidance to local groups interested in developing a range of suitable child care services. For information concerning day care facilities in Cambridge, call the CDCA at 876-5214.

### Veteran's Notice

Students who are veterans must complete and return the certification of attendance card to the Veterans Administration in order to receive assistance for the 1972-73 academic year. Changes in dependency or training status must be reported promptly. Veterans who do not have cards should call the Veterans Administration.

# Bicyclists Must Obey Auto Laws

Bicycling has become an increasingly popular means of transportation in the past several years and although there are some dangers in riding in the city, it can also be a safe way to travel.

Most motorists do not realize that bicyclists have the same rights as any other vehicle on the road and cyclists often forget that they have the same responsibilities, too. Bicycles are treated by traffic regulations as a vehicle.

Cyclists must ride on the right side of the road, obey the regulations, on one way streets, traffic lights and pedestrian signals and give clear hand signals. The Cambridge Traffic Safety Committee also suggests that cyclists install a bell and register their bikes at the Central Square police station.

The law also requires all bicycles have a white light at the front and a red reflector at the rear for night riding. A reflective vest or harness is helpful at night.

The major obstacle to safe cycling in the city is the automobile. Even if a cyclist has the right of way over a car, it is hard to press the point since the cyclist is more vulnerable to personal injury.

Opened car doors are the most frequent cause of danger for the cyclist. Pot holes and broken glass can be serious problems for the bike rider, as can dogs and pedestrians. Another problem, which is being rectified in many places, is the sewer grate with iron bars running parallel with the road—a perfect trap for bicycle tires.

Riding is not the only problem a



Some cyclists keep their bikes with them as one means of foiling thieves.

—Photo by Margo Foote

cyclist has. Bicycle theft is a serious problem but one that may be licked with the invention of an all but impenetrable bike lock, the stopper, developed by two MIT seniors. The students hope to have the lock into production early this fall.

Although bikes are usually forbidden on sidewalks, the city of Cambridge has designated the sidewalk area along the Charles

River as a bike way. Boston has similarly designated areas for cyclists, most notably along the center strip on Commonwealth Avenue.

Cycling can be a healthy way to get around but bike riders must realize the dangers involved. Bicycle experts say the risks can be reduced by taking biking seriously, staying alert and following the traffic regulations.

# New Parking Permits Will Be Issued Soon

With the return of students and the start of the academic year, the Campus Patrol begins one of its busiest periods of administrative work, issuing parking permits for the Institute community.

"The first few weeks of September are always hectic for us," explained Captain James Olivieri of the Campus Patrol.

"This year summer parking permits became invalid September 5, and new passes won't be issued for two or more weeks. We hope people waiting for passes will be patient with the patrolmen on duty at parking locations. Although they try to make space for as many summer pass holders as possible, they have to reserve places for permanent pass holders."

MIT has approximately 3,100 parking spaces at 20 different locations on- and off-campus. Each year the Institute Parking Committee, chaired by Professor August L. Hesselschwerdt of mechanical engineering and composed of representatives of all segment of the community, determines parking quotas for MIT departments based solely on the population in each department.

Once the quotas are established, the responsibility for allocating parking passes shifts to the departments. The Campus Patrol is concerned only with the actual issuing of the permits and record keeping.

"Many people with complaints or problems come to us, and usually there is nothing we can do to help," said Olivieri.

"Our responsibility for parking passes is purely administrative. We follow guidelines set by the

Institute Parking Committee and the departments. Requests for permits should be referred to them."

The Campus Patrol does assist the Parking Committee during the year by keeping day-to-day records of the number of empty spaces available at each parking area.

"All of our parking facilities are over-issued—sometimes by 70 or 80 percent—because people with passes work at different times. Our surveys allow the over-issuing process to continue until all the areas are filled.

"We also allow departments to exchange one-year permanent passes for 180 day passes which can be distributed as they wish. In addition, special arrangements can be made for permits for employees with disabilities and for vendor's permits."

The Patrol works with the Office of the Dean for Student Affairs to allocate student parking permits. The Dean's Office assigns passes for fraternities and other living groups on the basis of population and need. Some members of student government receive passes.

"Our general rule is that students living on campus, in Cambridge, or in Boston may not have permits," Olivieri said. "We feel that they can use the available public transportation.

For students who are not eligible for parking permits, the Patrol offers guidelines for parking on the streets around MIT, in Cambridge and in Boston. The guidelines include information on parking in snow emergencies, police ticketing practices, and streets where parking is usually available.

## Outlook Promising

# Rodwin, Susskind List Guidelines for New Towns

(Continued from page 1)

communities will be of the "new-town-in-town" variety. Cederal-Riverside (Minneapolis) and Welfare Island (New York City) are examples. Basically, such developments will seek to revitalize sagging inner city economies. They will also try to attract high-income residents back to the central city and to promote racial integration....

What might be surprising, and sad...is that most of the new communities completed twenty-five years hence will not fail; they will succeed...in a moderate and dull way: they will yield a small profit; provide a modicum of low and middle income housing, manage to stick fairly closely to the original development plans (having overcome the objections of various pressure groups), and will present no particular threat to the natural environment. The way of life for residents of these new communities will not be too different from that of other suburban dwellers. More persons may live comfortably, walk to work, have easier access to assorted recreational facilities, and perhaps even feel a greater sense of "belonging" because of their participation in a "social experiment." What is far less certain, though, is whether these new communities will serve the poor and disadvantaged, achieve a much greater socio-economic mix, spur significant innovations or, even more importantly, serve broader ends: i.e., will these new communities have a

significant impact on the larger population in areas outside the communities themselves?...

One could continue this accounting, but what it all adds up to is that some twenty-five years from now, we are likely to find critics of the new communities program arguing that public investment in these projects merely diverted resources from inner city redevelopment efforts and that our largest central cities are worse off than ever. They will be pointing out that our new communities accommodated a tiny fraction of our population growth over the last quarter of the 20th century, perhaps only 5 percent, possibly even only 1 or 2 percent. Other critics will be reminding us that back in the early 1970's, it was pointed out that new communities would never provide us with significant alternatives to conventional urban development. And the more radical commentators will be asserting that new communities are not (and couldn't be) a solution to urban problems since fundamental shifts in the distribution of resources and power are prerequisites to effective social change, and the new communities program certainly does not imply a significant redistribution of money or power.

This scenario is not altogether fetching. But perhaps it may provoke a hard-boiled reconsideration of what governmental intervention in the design and development of new communities can be expected to achieve. Suppose we were in the non-enviable position of those federal

decision-makers responsible for the administration of the new communities program. How would we run the program to ensure that we get the kind of cities we need and want? There are at least seven criteria that would govern our decisions:

1) *New communities ought not to be built when the expansion of existing communities will serve the same purposes.* But they will be built when they shouldn't be if our principal focus is on new communities and not on the urban growth objectives that we are trying to achieve.

2) *New communities ought not to lose money.* Yet they are likely to unless a reasonable proportion of the appreciation in land values or of earned income (realized through the sale or lease of commercial properties and the rise in land prices) can be captured by the developers. This also holds true for new communities built by public development corporations.

3) *New communities must provide a choice of jobs for all primary and secondary wage earners.* But they won't unless the number of new community developments is restricted and each is large enough to support a diversified set of economic activities, businesses and social services.

4) *New communities have to be socially acceptable in the second half of the twentieth century.* But they won't be unless they serve a reasonable proportion of disadvantaged minorities and middle income families directly and also

create reasonable economic and social opportunities for other disadvantaged groups in the surrounding metropolitan area.

5) *New communities should help to reduce congestion and slow down growth in our biggest cities and to reorganize development patterns in metropolitan areas.*

They won't contribute much to meeting these objectives, though, unless they are consciously conceived as a means of achieving them. Until a special effort is made to relate new community development to such things as national, state and regional planning for transportation, capital improvements programming, welfare policy and industrial development strategies, metropolitan growth patterns and current development trends are unlikely to be changed much.

6) *New communities should help to encourage the development of growth centers in lagging regions, especially in regions with a large unemployed and underemployed population.* Clearly they won't begin to do this difficult job if undue emphasis is placed on maximum returns to the developer or if new communities are planned without full recognition of the forces which impel migration and the location of economic activities.

7) *Aside from the six aforementioned criteria, it would be wonderful (and astonishing) if we could somehow produce two or three brilliant showpieces: breathtaking examples of more responsive and elegant ways of*

organizing our physical environment. For example, new communities might reflect the "educative city" of the future....

The hitch, however, is that it's incredibly difficult to ensure a brilliant performance. An unusual blend of initiative, rare ability and hard work (as well as a good measure of luck) will be required to produce two or three outstanding new communities. Penny-pinch programs and a fear of anything too different or too out-of-the-ordinary will tend to wipe out even these slim chances....

We find ourselves in a dilemma. From the conditions we have set, it looks as if we are guilty of advocating the best and making it the enemy of the good ("le mieux est l'ennemi du bien") and in the process vitiating the entire new communities program. It's just not so. We want a program that will work and that we can be proud of....

When goals are set too high, they must be trimmed down. In our case trimming goals means recognizing that new communities will simply serve as another string in the planner's bow, another way of organizing growth and developing resources in the suburbs, in the central cities as well as in poorer regions; and that we will be very lucky indeed if the tools are used well or at least not misused. We know that in a new program the language of hope is more appealing than the language of regret; but we would remind those whom we disappoint that the disillusioned generally suffer from illusions to begin with.

# Two MIT Professors Get Chemical Awards

Professor George H. Buchi, Camille Dreyfus Professor of Chemistry at MIT, received the 1973 Award for Creative Work in Synthetic Organic Chemistry from the American Chemical Society at their national meeting held in New York City last week.

A specialist in the chemistry of



Professor Buchi.

natural products, Dr. Buchi was recognized primarily for his synthesis of a number of complicated compounds, including aflatoxins, a highly toxic substance found in certain molds. The award was sponsored by the Synthetic Organic Chemical Manufacturers Association.

Also receiving an award from the American Chemical Society was Professor Emeritus Thomas K. Sherwood of chemical engineering, now a consulting professor at the University of California at Berkeley. Dr. Sherwood received the 1973 E.V. Murphree Award in Industrial and Engineering Chemistry.

Two MIT alumni were also honored at the recent American Chemical Society meeting. They are: Professor John I. Brauman of Stanford University, a 1959 graduate of MIT, who received the 1973 Award in Pure Chemistry sponsored by the Alpha Chi Sigma Fraternity; and Professor Kenneth B. Wiberg of Yale University, a 1948 graduate of the Institute, who received the 1973 Award in Physical Organic Chemistry sponsored by the Northeastern Section of the American Chemical Society.

All four recipients will receive the \$2,000 awards next April during the Society's 165th national meeting to be held in Dallas, Texas.

# Researchers Will Use Nuclear Reactor to Treat Brain Tumors

(Continued from page 1)

because the brain itself offers a means to distinguish normal brain cells from tumor cells. Within the brain is a barrier between circulating blood and brain tissue, often called the blood-brain barrier, that prevents certain materials in the bloodstream from entering the brain tissue itself. Boron compounds, for example, are unable to cross the barrier. In a tumor, however, where the barrier has broken down, boron compounds are readily absorbed by the malignant cells.

It is fortunate that boron is strongly absorbed by the tumor cells because an atom of boron can capture one neutron in its nucleus. Once it is captured, the extra neutron causes the boron nucleus to become unstable and eject an alpha particle composed of two positively charged protons and two neutrons. The alpha particle travels only a very short distance in the body, and stops after passing through, and destroying, one or two cells.

A major problem with the therapy when it was tried ten years ago was that the boron compound did not do its job well enough. Although it rapidly entered the tumor cells, it moved out of the cells just as quickly. That made it impossible to raise the boron level in the tumor cells higher than in the blood circulating through the brain, with the result that the treatment destroyed blood vessel cells as well as tumor cells.

Strangely, the new boron compound that will be used for the therapy was discovered in a search totally unrelated to medicine, one for new rocket fuels. Although no one is quite sure why,

the new boron compound does remain in the cell long enough for the blood to be cleared of the compound.

Careful controls have been instituted at both MGH and MIT to make certain that the treatment of patients with experimental techniques is well justified. Before the neutron capture therapy can be used on patients, it will be judged by committees on human studies at both institutions.

Dr. Brownell is optimistic about

the new therapy. He points to research by Dr. Hiroshi Hatanaka, formerly a fellow at MGH and now at the University of Tokyo Medical School, who has recently tried using the new compound for neutron capture therapy on patients in Japan. Although cancer is the kind of disease that demands a patient be observed for years before determining if a cure has been effected, Dr. Brownell says he is encouraged by Dr. Hatanaka's early results.

# Theatre Guild Opens with 'Peanuts' Musical

The Musical Theatre Guild will open this year's theatrical activities at the Institute with presentations of "Your're A Good Man Charlie Brown" in Kresge Little Theatre on Saturday and Sunday, September 16 and 17.

Featuring Carl Wischmeyer, a graduate student in aeronautics and astronautics from Fairhaven, New Jersey, in the title role, "Your're A Good Man Charlie Brown" presents scenes from the

## Chamber Seeks Student Interns

The Cambridge Chamber of Commerce is seeking student interns and work-study students to work on programs in urban affairs. Economic development, housing, transportation and occupational education are among the possible work areas. Faculty members and students may call the Chamber, 876-4100, to discuss the programs.



Mr. White, left, prepares to turn over the reins at Lab Supplies to Mr. Scarponi. —Photo by Margo Foote

# Party to Honor White for 50 Years Service

Arthur B. White will be honored on completion of 50 years service to the Institute at a reception at the Faculty Club on Wednesday, September 13.

Mr. White retired as manager of the Office of Laboratory Supplies on September 1. The reception is being arranged by the Purchasing Office and is open to all members

of the community. Persons who wish to attend may call Kelly Curtis, Ext. 3-7245, or Kay Rayn, Ext. 3-4953, to make reservations before Friday, September 8.

A Cambridge native, Mr. White came to the Institute as a stock boy in 1922 at the age of 15. With the exception of military service during World War II, he has been with Laboratory Supplies throughout his career.

"Arthur has held every position in that office," according to G. Edward Nealand, director of purchasing. "For many years he has been responsible for guiding the growth of the office in response to the expanding needs of the Institute."

As an example Mr. Nealand said that the cost of laboratory and office supplies amounted only to about \$50,000 per year 25 years ago. "Now the figure is over \$1 million annually," he said.

Mr. White will be succeeded as manager of the office by Danti J. Scarponi of Cambridge. Mr. Scarponi joined the Institute in the Radiation Laboratory during World War II, and has been with the Office of Laboratory Supplies since 1946.

In addition, Stanley N. Roach, also of Cambridge, has been appointed administrative officer for the Office of Laboratory Supplies. Mr. Roach has been with the office since 1959.

For many years Mr. White has made his home in Arlington where he has been active in youth activities. He was also one of the founding members of the MIT Quarter Century Club, an organization of men who have worked at MIT for 25 years.

Mr. White will be the sixth man to achieve 50 years service with MIT in recent years. Because of labor laws and Institute retirement policy, Mr. White is believed to be the last member of the community to reach the 50-year mark by the age of 65.

Others who have reached that milestone are: Abner Stodder of Somerville and William O'Connor of Arlington, both formerly with Physical Plant; Frederick Broderick of Cohasset, formerly with electrical engineering; Walcott A. Hokanson of Deerfield, New Hampshire, Bursar Emeritus; and H.H. Carter of Cambridge, a technical instructor in chemical engineering.

# Knight Gets Alumni Position

Richard A. Knight of Beverly assumed his new post this week as Associate Secretary of the Alumni Association.

Mr. Knight, who received the S.B. degree in management from MIT in 1947, has been active in Alumni Association activities, working on the Alumni Advisory Council and the Alumni Fund. For the past three years Mr. Knight has served as consultant for eight small companies on their present operations, sales and financial forecasts. Prior to that he was Vice President of MSL Industries in Racine, Wisconsin.

As the Alumni Association's Associate Secretary, Mr. Knight will be responsible primarily for expanding its continuing education program. The ten-year-old program of seminars on topics of interest to alumni is designed as a forum for the interaction of old and younger alumni.

Mr. Knight will also be involved with class reunions and the development of seminar programs on a departmental basis.

# More Student Jobs Needed

The unusual scarcity of summer jobs will create a hefty increase in the number of students seeking term-time employment this fall, according to Daniel T. Langdale, director of student employment at MIT.

"The Student Employment Office serves as the job clearinghouse for MIT students, and we're already beginning to feel the pressure," Mr. Langdale said.

"We expect the number of job seekers to reach its peak level in the next few weeks, with no matching increase in the number of employment situations."

One way employers can ease the pressure, Mr. Langdale said, is by hiring more students at fewer hours-per-week.

"In the past many jobs were described as 20 hours-per-week for one student. We are urging employers in this type of situation to hire two students for ten hours-per-week each and in general to limit each job to eight to 12 hours-per-week."

MIT offices with job openings for students may contact the Student Employment Office, Room 5-119, Ext. 3-4971, for revised student rate schedules and further information and guidelines.

# Matrons Give English Class

Registration for English conversation classes for foreign wives at MIT will be held on Thursday, September 21, from 10am to noon in the Emma Rogers Room, 10-340.

Sponsored and taught by the Technology Matrons, the class will meet regularly on Tuesday and Thursday mornings for 18 sessions. Instruction is offered on three levels—beginning, intermediate and advanced—but the course carries no academic credit.

A charge of \$15 covers instruction, books, and coffee hours following each session. Child care will be provided for pre-school children for an additional fee of \$5 per family.

For more information, call Mrs. Robert J. Holden on Ext. 3-5085 or 491-6784, or Mrs. J. Francis Reintjes at 484-3595.